

Advanced Concepts and Requirements (ACR) M&S Update, Assessment, & Projection

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PURPOSE

- Provide an update on ACR Domain M&S accomplishments and challenges
 - Mission & Tasks
 - Capability Gaps
 - Progress Assessment
 - Projection
 - Summary

Mission & Tasks

- **Mission:** Develop M&S capabilities that support Army Senior Leadership decision making for:
 - **Strategic Direction:** develop & assess plans, strategic concepts & programs to achieve NMS, DPG & policy (allocate & optimize resources to meet the strategy)
 - **Concept Development:** develop strategic, operational, tactical warfighting functional concepts (full range of Army capabilities in future operations & battlefields)
 - **Capabilities Determination:** ID changes in strategic battlefield & institutional military capability requirements (DOTMLPF analysis)
 - **Force Planning:** - determine capabilities, requirements & risks for force levels, design & structure of Army units (forces are sized, balanced & stationed to meet the strategy)
- **Tasks:**
 - Provide analytic M&S support to:
 - GWOT
 - Current Force
 - Future Force Development
 - Joint Interdependency Efforts
 - Leverage and Partner

Focus of ACR M&S Efforts - Fix the Capability Gap

Capability Gaps

- As JOpsCs, JOCs, JFCs & JICs evolve and mature; needed capabilities will be developed for improved representation
- Initial areas of concentration derived from work done by MAWGS and FACTs
 - C4ISR
 - Urban Operations
 - Joint Interagency Multinational
 - Logistics
 - Soldier
 - Operational Environment

Framework is in place to assess M&S capability gaps, determine requirements/priorities and develop solutions

Capability Gap Assessment (FY02-05)

		<u>FY02</u>	<u>FY03</u>	<u>FY04</u>	<u>FY05</u>
C4ISR					
	Sensor Representation				
	Communications				
	Situation Awareness/Fusion				
	Info Opns				
	Decision-making				
	Networked Fires				
Urban Operations					
	Human Behaviors				
	Search & Tgt Acquisition				
	Mobility				
	Environmental Representation				
	Communications				
	Weapons Effects				
Joint Campaign Contingency Analysis					
	Campaign M&S				
	Contingencies				
Logistics					
	CSS C4I				
	Fuel, Arm, Fix				
	Sustain, Man				
	Manage Distribution Network	→	↑	↓	↑
TOTAL EFFORT (\$M)					

FY02-03 focus was FCS MS B A&A; FY04-05 FACT CRAs developed

Capability Gap Projection (FY06-11)

		<u>FY06</u>	<u>FY07</u>	<u>FY08</u>	<u>FY09</u>	<u>FY10</u>	<u>FY11</u>
C4ISR	HUMINT						
	Red/Blue Communications Degradation						
	BDA						
Urban Operations							
	Small Vehicle Mobility						
	Sound propagation						
	Search & Tgt Acq						
Joint Interagency Multinational							
	Asymmetric Warfare						
	WMD						
	Joint Urban						
	SASO						
	Interagency Multinat'l						
Logistics							
	Distribution Operations						
	Command & Control Processes						
	Forecast Demand (Med/Maint)						
Soldier							
	Close Rg Quick Reaction						
	Acq of Human entitites						
Operational Environment							
	Effects of Noncombatants						
	Factional Alligences	→	↓	↓	↑	↑	↑

Summary

- Framework is in place to assess M&S capability gaps, determine requirements/priorities and develop solutions
- Good progress has been made in better representing C4ISR, Urban Ops and Joint Campaign capabilities
- Projected reduced resources will require future effort to focus primarily on higher priority capability gaps
- Domain will continue to pursue additional leveraging and partnering opportunities w/ ARSTAF, Services, JCS, OSD and COCOMs